

EMMA Requirements

The requirements for EMMA have been defined by the CHISOX Replacement Committee as a set of modifications to the requirements defined for the Extensible Measurement System in February 1999.

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1. Added Requirements

- *RF 4a provide continuous data integrity monitoring during acquisition and processing*
- *RF17a The system should identify missing or out of range parameters and allow operator intervention/override*
- *RF30a. 'Online/real-time' version control/change management*
- *RF21a Ability to run to various modes: debugging, maintenance, calibration, ...*

2. Removed Requirements

- RF10. Ability to easily define and modify division between on-line and offline processing.
- RF11. The system should be "open" (public interfaces, APIs, etc.)

3. Modified Requirements

- RF 5. Archive raw and reduced data, *including configuration, process, and changes made*
- RF 8. Ability to modify data processing *with minimal delay*
- *RF12. ability to accommodate other data sources in place of DAQ (e.g., simulations)*
- RF13. Ability to *easily modify* configure hardware, measurement, processing, visualization, and data storage
- RF17. Reconfiguration does not necessarily mean that the system has to be restarted (rebooted)
- *RF17. Minimize disruption to measurements when reconfiguring system*
- *RF27. Ability to schedule unattended measurements (consistent with equipment and personnel safety requirements)*
- RF35. Ability to print, email, and/or to save to a file, the current display being shown
- RS12. Ability to connect comments *to any portion of the data (raw, reduced, 'published', etc.)*